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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/667,010

09/19/2003

Madhu C. Patel

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9133

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08/29/2006

LSI Logic Corporation
Corporate Legal Department
Intellectual Property Services Group
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EXAMINER

INGBERG, TODD D

ART UNIT

PAPER NUMBER

2193

DATE MAILED: 08/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/667,010	Applicant(s) PATEL ET AL.	
	Examiner Todd Ingberg	Art Unit 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/19/2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1 – 17 have been examined.

Drawings

1. Figure s 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1 – 17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The current focus of the Patent Office in regard to statutory inventions under 35 U.S.C. § 101 for method claims and claims that recite a judicial exception (software) is that the claimed invention recite a practical application. Practical application can be provided by a physical transformation or a useful, concrete and tangible result. No physical transformation is recited and additionally, the final result of the claim is estimate which is not a tangible result because result is not clearly claimed to be tangibly embodied on a computer readable medium.

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The following link on the World Wide Web is for the United States Patent And Trademark Office (USPTO) policy on 35 U.S.C. §101.

http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 – 2, 4 - 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over William H. Roetzheim et al., Software **Project** Cost & Schedule Estimating from 1998 (**Project**) in view of USPN 6,513,154 B1 **Porterfield** filed October 21, 1996 and issued January 28, 2003.

Claim 1

Project teaches a method of estimating a schedule for testing software (**Project**, page 17, Heuristic approach and pages 73 - 76, Software defect estimates etc), comprising the steps of estimating a number of test cases based on a number of received problem reports for the software (**Project**, page 36, test case38, STP, 39 – Test Incident Report, 41 – STP); Although, **Project** teaches basing estimates on historical comparisons and capturing heuristics. **Project** does not explicitly teach the updating of the testing effort. It is **Porterfield** who explicitly teaches modifying the estimated number of test cases using historic data from similar projects to produce an estimated time (**Porterfield**, Figures 4 and 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine **Project** and **Porterfield**, because updating based on heuristics allows for calibration of schedule planning.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Project** and **Porterfield** as applied to claim 2 above, and further in view of A First Course in Business Statistics, by James Mc Clave et al 1992.

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Claim 2

The method of claim 1, wherein the step of estimating a number of test cases includes raising the number of received problem reports to an exponent less than one, and then adding a number thereto. Project and Porterfield teach estimating the number of test cases but do not teach the use of exponents. It is Mc Clave who teaches the use of exponents in estimating reliability of Software (McClave, pages 271 – 272). therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine Project, Porterfield and McClave because use of exponents can assist in estimating the error rates.

Claim 3

The method of claim 1, wherein the historic data includes data indicating the amount of resources dedicated to testing the software. (Project, page 73, Figure 30 – Estimated Personnel).

Claim 4

The method of claim 1, wherein the steps of estimating and modifying are performed on an information processing system. As per claim 1.

Claim 5

Project teaches a method of estimating a schedule for testing software (As per claim 1), comprising the steps of: estimating a number of test cases based on a number of received problem reports for the software (As per claim 1);

scaling the number of test cases by a first factor to produce a first result (Project, pages 31 – 34, Coefficients impacts on projects);

scaling the first result by a second factor to produce an estimated time (Project, page 47, Factors of Projects).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine Project and Porterfield, because updating based on heuristics allows for calibration of schedule planning.

Claim 6

The method of claim 5, wherein the step of estimating a number of test cases includes raising the number of received problem reports to an exponent less than one, and then adding a number thereto. As per claim 2.

Claim 7

The method of claim 5, wherein the first factor is derived from historic data from similar projects. As per claim 1.

Claim 8

The method of claim 5, wherein the second factor is derived from data including the amount of resources dedicated to testing the software. As per claim 3.

Claim 9

The method of claim 5, wherein the steps of estimating a number of test cases, scaling the

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number of test cases, and scaling the first result are performed on an information processing system. As per claim 5.

Claim 10

An apparatus for estimating a schedule for testing software, comprising: first data indicating the number of problem reports received for the software; and second data indicating the amount of resources dedicated to testing the software; wherein the first data are used to estimate a number of test cases; wherein the number of test cases is scaled by historic data to produce a scaled number of test cases. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine Project and Porterfield, because updating based on heuristics allows for calibration of schedule planning. As per claim 1.; and wherein the scaled number of test cases is scaled by the second data. As per claim 5.

Claim 11

The apparatus of claim 10, wherein the number of test cases is estimated by raising the first data to an exponent less than one, and then adding a number thereto. As per claim 2.

Claim 12

The apparatus of claim 10, wherein the historic data is gathered from testing of similar software. As per claim 1.

Claim 13

An information processing system for estimating a schedule for testing software (as per claim 1), comprising:

first computer readable instructions for estimating a number of test cases based on a number of received problem reports for the software (As per claim 1);

second computer readable instructions for scaling the number of test cases by a first factor to produce a first result; third computer readable instructions for scaling the first result by a second factor to produce an estimated time (As per claim 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine Project and Porterfield, because updating based on heuristics allows for calibration of schedule planning. As per claim 5.

Claim 14

The system of claim 13, wherein the step of estimating a number of test cases includes raising the number of received problem reports to an exponent less than one, and then adding a number thereto. As per claim 2.

Claim 15

The system of claim 13, wherein the first factor is derived from historic data from similar projects. As per claim 1.

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Claim 16

The system of claim 13, wherein the second factor is derived from data including the amount of resources dedicated to testing the software. As per claim 3.

Claim 17

The system of claim 13, wherein the steps of estimating a number of test cases, scaling the number of test cases, and scaling the first result are performed on an information processing system. As per claim 9.

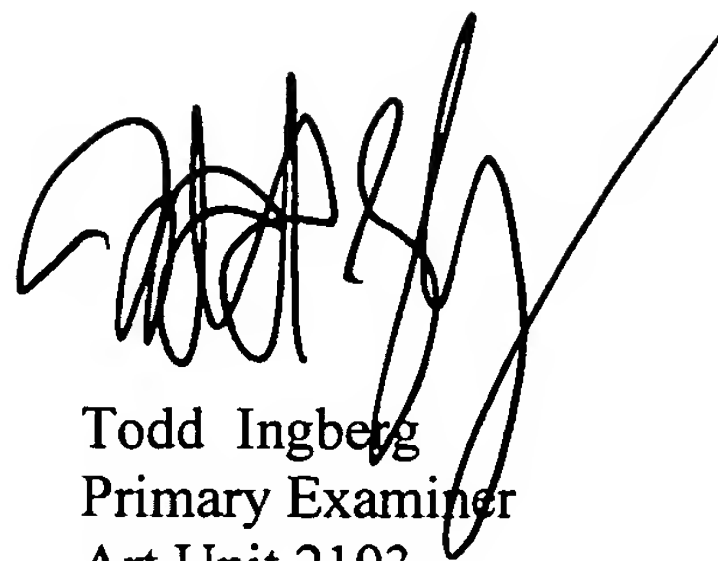
Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Todd Ingberg whose telephone number is (571) 272-3723. The examiner can normally be reached on during the work week..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Todd Ingberg
Primary Examiner
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